



17082-081001 / 24736-2073

SEQUENCE LISTING

<110> van den Boom, Dirk

Böcker, Sebastian

<120> FRAGMENTATION-BASED METHODS AND SYSTEMS  
FOR SEQUENCE VARIATION DETECTION AND DISCOVERY

<130> 24736-2073

<140> 10/723,365  
<141> 2003-11-26

<150> US 60/429,895  
<151> 2002-11-27

<160> 85

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<210> 1  
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<212> PRT  
<213> Artificial Sequence

<220>  
<223> Renin cleavage site

<400> 1  
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1 5

<210> 2  
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<220>  
<223> Factor Xa cleavage site

<220>  
<221> VARIANT  
<222> 5  
<223> Xaa = Any Amino Acid Except Pro or Arg

<400> 2  
Ile Glu Gly Arg Xaa  
1 5

<210> 3  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Factor Xa cleavage site

<220>  
<221> VARIANT  
<222> 5  
<223> Xaa = Any Amino Acid Except Pro or Arg

<400> 3  
Ile Asp Gly Arg Xaa  
1 5

<210> 4  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Factor Xa cleavage site

<220>  
<221> VARIANT  
<222> 5  
<223> Xaa = Any Amino Acid Except Pro or Arg

<400> 4  
Ala Glu Gly Arg Xaa  
1 5

<210> 5  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Collagenase cleavage site

<220>  
<221> VARIANT  
<222> 2, 5  
<223> Xaa = Any Amino Acid

<400> 5  
Pro Xaa Gly Pro Xaa  
1 5

<210> 6  
<211> 49  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Forward primer for base-specific cleavage

<400> 6  
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49

<210> 7  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Reverse primer for base-specific cleavage

<400> 7  
agaagagag cgcctcggca aagtacac

28

<210> 8  
<211> 340

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<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon for base-specific cleavage

<400> 8
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gtggccatca ttccttattt catcacgtg ggcaccgaga tagctgagca ggaaggaaac 120
cagaaggcg agcagccac ctcccggcc atcctcaggg tcataccgtt ggttaagggtt 180
tttagaatct tcaagctctc ccgcactt aaggccctcc agatcctggg ccagaccctc 240
aaagcttagta tgagagagct agggctgctc atcttttcc tcttcatcgg ggtcatcctg 300
tttcttagtg cagtgtactt tgccgaggcg ctctcttcct 340

<210> 9
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Forward primer for partial cleavage

<220>
<221> modified_base
<222> 1
<223> Biotinylated

<400> 9
cccaagtacg acgttgtaaa acg 23

<210> 10
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Reverse primer for partial cleavage

<400> 10
agcggataac aatttcacac agg 23

<210> 11
<211> 117
<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon for partial cleavage

<400> 11
cccaagtacg acgttgtaaa acgtccaggg aggactcacc atgggcattt gattgcagag 60
cagctccgag tccatccaga gtttcctgca gtcacctgtg tgaaatgtt atccgct 117

<210> 12
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Reference sequence

<220>
<221> misc_feature
<222> 11
<223> n = C or A

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<220>
<221> misc_feature
<222> 1, 2, 3, 8, 9, 10, 12, 13, 14, 19, 20, 21
<223> n = A,T,C or G

<400> 12
nnnactgnnn nnnntgacnn n 21

<210> 13
<211> 583
<212> DNA
<213> Artificial Sequence

<220>
<223> CETP Amplicon

<400> 13
cttcagtgt cacaccgacc ctatgagttt ggcggtaaaa ctgtcccat tttacacaca 60
ggaaaactta gtgaatggca aggctgggt tgagcccagc tctattgccc ccaaagataa 120
ggctccattc cctgcgtccat ttcccaggca tagggacttg tagggggctg gaaccccagg 180
atcaactctg ggctcagagg gccccagcaa taagtactg ttgattactc ctgatcccaa 240
agctgacttc aggcaagctc cttggagggtc gcagccctt ctgctatgc ccagtggcaa 300
tgatgttcat aatcccaactc ctcagtgcag ggttccacta agaaccatg atctcctacc 360
tcaaattggac ctcatgttt ctgagtaagc ctcctcagc tttctgtca cctcactccc 420
cccacccact gcaatgactt cttcaggcct tccctgccc cctcaaatct ccagctgccc 480
cctcctgtct accttccact tccctctcca cacacaacct gtttaccaga gagctgagca 540
gagccaccaa cagaacttcc ccccccacgtc gctgctccca gtc 583

<210> 14
<211> 483
<212> DNA
<213> Mycobacterium abscessus

<300>
<308> EMBL Accession No. AJ536038
<309> 2003-01-03

<400> 14
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tctaataccg gataggacca cacacttcat ggtgagttgt gcaaagctt tgccgtgtgg 120
gatgagcccg cggcctatca gcttgggtt gggtaatgg cccaccaagg cgacgacggg 180
tagccggcct gagaggggtga cggccacac tggactgag atacggccca gactcctacg 240
ggaggcagca gtggggata ttgcacaatg ggcgaagcc tgatgcagcg acgcccgcgtg 300
aggatgacg gccttcgggt tggaaacctc tttcactgtt gacgaagcga aagtgacgg 360
actacagaa gaaggacgg ccaactacgt gccagcagcc gcgtaataac gtagggtccg 420
agcgttgtcc ggaattactg ggcgtaaaga gctcgttagt gtttgcgc gttgttcgtg 480
aaa 483

<210> 15
<211> 495
<212> DNA
<213> Mycobacterium avium

<300>
<308> EMBL Accession No. AJ536037
<309> 2003-01-03

<400> 15
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tctaataccg gataggacct caagacgcat gtcttctgg gggaaagctt tgccgtgtgg 120
gatggggcccg cggcctatca gcttgggtt ggggtacgg cctaccaagg cgacgacggg 180
tagccggcct gagaggggtgt cggccacac tggactgag atacggccca gactcctacg 240
ggaggcagca gtggggata ttgcacaatg ggcgaagcc tgatgcagcg acgcccgcgtg 300
ggggatgacg gccttcgggt tggaaacctc tttcaccatc gacgaaggc cgggtttct 360
cgattgacg gtaggtggag aagaaggcacc ggcacactac gtcgcagcag cccgcgtaat 420

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acgttagggtg cgagcgttgt ccggaattac tggcgtaaa gagctcgtag gtggttgtc 480  
 gcgttgtcg tgaaa 495

<210> 16  
 <211> 495  
 <212> DNA  
 <213> *Mycobacterium celatum*

<300>  
 <308> EMBL Accession No. AJ536040  
 <309> 2003-01-03

<400> 16  
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 tctaataccg gataggacca tgggatgcac gtcttgggt ggaaagcttt tgcgggtgtgg 120  
 gatggggcccg cggcctatca gcttgggt ggggtgatgg cctaccagg cgacgacggg 180  
 tagccggccct gagaggggtgt cggccacac tggactgag atacggccca gactcctacg 240  
 ggaggcagca gtgggaaata ttgcacaatg ggcaagggcc tgatgcacg acgcccgtg 300  
 gggatgacg gccttcgggt tggaaacccct tttcaccatc gacgaagctg cccgtttcc 360  
 ggtggtgacg gtaggtggag aagaagcacc ggccaactac gtgccagcag ccgcggtaat 420  
 acgttagggtg cgagcgttgt ccggaattac tggcgtaaa gagctcgtag gtggttgtc 480  
 gcgttgtcg tgaaa 495

<210> 17  
 <211> 483  
 <212> DNA  
 <213> *Mycobacterium fortuitum*

<300>  
 <308> EMBL Accession No. AJ536039  
 <309> 2003-01-03

<400> 17  
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 tctaataccg aatatgacca cgcgcattcat ggtgtgtgg ggaaagcttt tgcgggtgtgg 120  
 gatggggcccg cggcctatca gcttgggt gggtaatgg cctaccagg cgacgacggg 180  
 tagccggccct gagaggggtga cggccacac tggactgag atacggccca gactcctacg 240  
 ggaggcagca gtgggaaata ttgcacaatg ggcaagggcc tgatgcacg acgcccgtg 300  
 agggatgacg gccttcgggt tggaaacccct tttcaatagg gacgaagcgc aagtgacggt 360  
 acctatagaa gaaggacccg ccaactacgt gccagcagcc gcggtataac gtagggtccg 420  
 acgttgttgc ggaattactg gggtaaaga gctcgtaggt ggttgtcgc gttgtcgtg 480  
 aaa 483

<210> 18  
 <211> 495  
 <212> DNA  
 <213> *Mycobacterium gordonae*

<300>  
 <308> EMBL Accession No. AJ536042  
 <309> 2003-01-03

<400> 18  
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 tctaataccg aataggacca caggacacat gtccgtgg ggaaagcttt tgcgggtgtgg 120  
 gatggggcccg cggcctatca gcttgggt ggggtgatgg cctaccagg cgacgacggg 180  
 tagccggccct gagaggggtgt cggccacac tggactgag atacggccca gactcctacg 240  
 ggaggcagca gtgggaaata ttgcacaatg ggcaagggcc tgatgcacg acgcccgtg 300  
 gggatgacg gccttcgggt tggaaacccct tttcaccatc gacgaaggcc cccgtttcc 360  
 cggcgtacg gtaggtggag aagaagcacc ggccaactac gtgccagcag ccgcggtaat 420  
 acgttagggtg cgagcgttgt ccggaattac tggcgtaaa gagctcgtag gtggttgtc 480  
 gcgttgtcg tgaaa 495

<210> 19  
 <211> 495

&lt;212&gt; DNA

<213> *Mycobacterium intracellulare*

&lt;300&gt;

&lt;308&gt; EMBL Accession No. AJ536036

&lt;309&gt; 2003-01-03

&lt;400&gt; 19

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acgggtgagt aacacgtggg caatctgccc tgcacttcgg gataaggctg ggaaactggg 60
tctaataccg gataggacca cttggcgcacat gcctttaggt ggaaagctt tgcgggtgtgg 120
gatggggcccg cggcctatca gcttgggtt ggggtatgg cctaccaagg cgacgacggg 180
tagccggcct gagaggggtgt ccggccacac tgggactgag atacggccca gactcctacg 240
ggaggcagca gtgggaaata ttgcacaatg ggcgcaagcc tgatgcagcg acgcccgcgtg 300
ggggatgacg gccttcgggt tgtaaaccc tcaccatc gacgaaggtc cgggtttct 360
cgatttgacg gtaggtggag aagaagcacc ggccaactac gtgccagcag ccgcggtaat 420
acgtagggtg cgagcgttgtt ccggaattac tggcgtaaa gagctcgtag gtgggttgc 480
gcgttggtc tgaaa 495

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&lt;210&gt; 20

&lt;211&gt; 495

&lt;212&gt; DNA

<213> *Mycobacterium kansasii*

&lt;300&gt;

&lt;308&gt; EMBL Accession No. AJ536035

&lt;309&gt; 2003-01-03

&lt;400&gt; 20

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acgggtgagt aacacgtggg caatctgccc tgcacaccgg gataaggctg ggaaactggg 60
tctaataccg gataggacca cttggcgcacat gcctttaggt ggaaagctt tgcgggtgtgg 120
gatggggcccg cggcctatca gcttgggtt ggggtacgg cctaccaagg cgacgacggg 180
tagccggcct gagaggggtgt ccggccacac tgggactgag atacggccca gactcctacg 240
ggaggcagca gtgggaaata ttgcacaatg ggcgcaagcc tgatgcagcg acgcccgcgtg 300
ggggatgacg gccttcgggt tgtaaaccc tcaccatc gacgaaggtc cgggtttct 360
cgatttgacg gtaggtggag aagaagcacc ggccaactac gtgccagcag ccgcggtaat 420
acgtagggtg cgagcgttgtt ccggaattac tggcgtaaa gagctcgtag gtgggttgc 480
gcgttggtc tgaaa 495

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&lt;210&gt; 21

&lt;211&gt; 495

&lt;212&gt; DNA

<213> *Mycobacterium marinum*

&lt;300&gt;

&lt;308&gt; EMBL Accession No. AJ536032

&lt;309&gt; 2003-01-03

&lt;400&gt; 21

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acgggtgagt aacacgtggg cgatctgccc tgcacttcgg gataaggctg ggaaactggg 60
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gatggggcccg cggcctatca gcttgggtt gggtaacgg cctaccaagg cgacgacggg 180
tagccggcct gagaggggtgt ccggccacac tgggactgag atacggccca gactcctacg 240
ggaggcagca gtgggaaata ttgcacaatg ggcgcaagcc tgatgcagcg acgcccgcgtg 300
ggggatgacg gccttcgggt tgtaaaccc tcaccatc gacgaagggtt cgggtttct 360
cgatttgacg gtaggtggag aagaagcacc ggccaactac gtgccagcag ccgcggtaat 420
acgtagggtg cgagcgttgtt ccggaattac tggcgtaaa gagctcgtag gtgggttgc 480
gcgttggtc tgaaa 495

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&lt;210&gt; 22

&lt;211&gt; 492

&lt;212&gt; DNA

<213> *Mycobacterium scrofulaceum*

&lt;300&gt;

&lt;308&gt; EMBL Accession No. AJ536034

&lt;309&gt; 2003-01-03

<400> 22  
 acgggtgagt aacacgtggg caatctgccc tgcacttcgg gataaggctg ggaaactggg 60  
 tctaataccg gataggacca cttggcgcat gccttgggt ggaaagctt tgcggtgtgg 120  
 gatggggcccg cggcctatca gctagttggt ggggtgatgg cctacccaagg cgacgacggg 180  
 tagccggcct gagagggtgt cggccacac tgggacttag atacggccca gactcctacg 240  
 ggaggcagca gtggggaata ttgcacaatg ggcgcaagcc tgatgcagcg acggcgctg 300  
 gggatgacg gcttcgggt tggaaaccctc ttccaccatc gacgaaggct cactttgtgg 360  
 gttgacggta ggtggagaag aagcaccggc caactacgtg ccagcagccg cgtaatacg 420  
 tagggtgccgca gcggtgtccg gaattactgg gcgtaaagag ctcgtaggtg gttgtcg 480  
 ttgttcgtga aa 492

&lt;210&gt; 23

&lt;211&gt; 485

&lt;212&gt; DNA

<213> *Mycobacterium smegmatis*

&lt;300&gt;

&lt;308&gt; EMBL Accession No. AJ536041

&lt;309&gt; 2003-01-03

<400> 23  
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 tctaataccg aatacacccat gctggtcgca tggcctggta gggaaaagct tttgcgggtgt 120  
 gggatgggcc cgcggcctat cagcttgggt gtgggggtgat ggcctaccaa ggcgacgacg 180  
 ggtagccggc ctgagagggt gacccggccac actgggactg agatacggcc cagactccta 240  
 cgggaggcag cagtggggaa tattgcacaa tgggcaag cctgatgcag cgacgcccgcg 300  
 tgaggatgatg cggccttcgg gttgtaaacc tcttcagca cagacgaagc gcaagtgacg 360  
 gtatgtcag aagaaggacc ggccaactac gtgccagcg ccgcggtaat acgtagggtc 420  
 cqagcgttgtt ccggattac tggcgtaaaa gagctcgtag gtggttgtc gcgtgttcg 480  
 tgaaa 485

&lt;210&gt; 24

&lt;211&gt; 497

&lt;212&gt; DNA

<213> *Mycobacterium tuberculosis*

&lt;300&gt;

&lt;308&gt; EMBL Accession No. AJ536031

&lt;309&gt; 2003-01-03

<400> 24  
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 gggatgagcc cgcggcctat cagcttgggt gtgggggtgac ggcctaccaa ggcgacgacg 180  
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 cgggaggcag cagtggggaa tattgcacaa tgggcaag cctgatgcag cgacgcccgcg 300  
 tgaggatgatg cggccttcgg gttgtaaacc tcttcacca tcgacgaagg tcgggttct 360  
 ctcggattgatg cggtaggtgg agaagaagca ccggccaact acgtgccagc agccgcggta 420  
 atacgttaggg tgcgagcgtt gtccggaaatt actgggctgta aagagctcg aggtggttt 480  
 tcgcgttgtt cgtaaaa 497

&lt;210&gt; 25

&lt;211&gt; 499

&lt;212&gt; DNA

<213> *Mycobacterium xenopi*

&lt;300&gt;

&lt;308&gt; EMBL Accession No. AJ536033

&lt;309&gt; 2003-01-03

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gtgggatggg cccgcggcct atcagcttgc tgggggggtg atggcctacc aaggcgacga 180  
 cggtagccg gcctgagagg gtgtccggcc acactggac tgagatacgg cccagactcc 240  
 tacgggagggc agcagtgggg aatattgcac aatggggcga agcctgatgc agcgacgccc 300  
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 ttctctgtgtt gacggtaggg gcagaagaag caccggccaa ctacgtgcc acaagccgcgg 420  
 taatacgtag ggtcaagcg ttgtccggaa ttactggcg taaagagctc gtaggcggct 480  
 tgtcgcgttg ttctgtggaa 499

<210> 26  
<211> 492  
<212> DNA  
<213> *Mycobacterium paraffinicum*

<400> 26  
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 gatggggcccg cggcctatca gcttgggtt ggggtatgg cctaccaagg cgacgacggg 180  
 tagccggcct gagagggtgt ccggccacac tggacttag atacggccca gactcctacg 240  
 ggaggcagca gtggggataa ttgcacaatg ggcgaagcc tgatgcagcg acgcccgcgt 300  
 gggatgacg gccttcgggt tggtaaacctc tttcaccatc gacgaaggct cacttcgtga 360  
 gttgacggta ggtggagaag aagcacggc caactacgtg ccagcagcc cgtaatac 420  
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 tttttcgtga aa 492

<210> 27  
<211> 483  
<212> DNA  
<213> *Mycobacterium interjectum*

<400> 27  
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 gatggggcccg cggcctatca gcttagttt ggggtacgg cctaccaagg cgacgacggg 180  
 tagccggcct gagagggtgt ccggccacac tggacttag atacggccca gactcctacg 240  
 ggaggcagca gtggggataa ttgcacaatg ggcgaagcc tgatgcagcg acgcccgcgt 300  
 gggatgacg gccttcgggt tggtaaacctc tttcagcagg gacgaagcgc aagtgacggt 360  
 acctgcagaa gaagcacggc ccaactacgt gccagcagcc gcgtaatac gtagggtgcg 420  
 acgttgcgc ggaattactg ggcgtaaaga gctcgttagt gtttgcgc gtttgcgc 480  
 aaa 483

<210> 28  
<211> 484  
<212> DNA  
<213> *Mycobacterium aurum*

<400> 28  
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 tctaataccg aataggacta cggcgatgcgc gtcgtgtgg ggaaagctt tgcgggtgtgg 120  
 gatggggcccg cggcctatca gcttgggtt gaggttacgg ctcaccaagg cgacgacggg 180  
 tagccggcct gagagggtgt ccggccacac tggacttag atacggccca gactcctacg 240  
 ggaggcagca gtggggataa ttgcacaatg ggcgaagcc tgatgcagcg acgcccgcgt 300  
 agggatgacg gccttcgggt tggtaaacctc tttcggcagg gacgaagcgc aagtgacggt 360  
 acctggagaa gaaggacggc ccaactacgt gccagcagcc gcgtaatac ctaggggtgc 420  
 gagcgttgcgc gggaaattact gggcgtaaaag agctcgttagt tggtttgcgc cgttgcgc 480  
 gaaa 484

<210> 29  
<211> 1542  
<212> DNA  
<213> *Escherichia coli*

<300>  
<308> GenBank Accession No. AE000460  
<309> 2003-01-03

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<210> 30  
<211> 340  
<212> DNA  
<213> Bordetella avium
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gccttagtagc  gggggataac  tacggcaaaag  cgtacttaat  accgcatacg  ccctacgggg  180
aaaacggggg  gaccttcggg  cctcgaacta  tttagacggc  cgatatacgga  tttagctgtt  240
ggtggggtaa  cgcttaccca  aggcgacgat  ccgttagctgg  ttttagaggg  cgaccagcca  300
caactgggact  gagacacggc  ccagactcct  acggggaggca  340

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<210> 31
<211> 339
<212> DNA
<213> Bordetella trematum
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<400> 31
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gcccgatgc gggggataac taccgaaag cgtggctaatt accgcatacg ccctacgggg 180
aaaggcgggg acatttcgggc ctcgcactat ttggacggcc gatatacgat tagctatgtt 240
gtggggtaac ggctcaccaa ggcgacgatc cgtagctgggt ttgagaggac gaccagccac 300
actgggactg agacacggcc cagactccta cgggaggca 339
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<210> 32
<211> 1496
<212> DNA
<213> Bordetella petrii
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<220>
<221> misc_feature
<222> 821
<223> n = A, T, C or G
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<300>

<308> GenBank Accession No. AJ249861  
<309> 2003-01-03

<400> 32  
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actattggag cggccgatat cggtagatct agtgggtggg gtaaaggcct accaaggcga 240  
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<210> 33  
<211> 363  
<212> DNA  
<213> Bordetella strain SHA-1

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gagcgactca cttccgggtg ggggataact gtcggaaagg gcccgtatgc 180  
tcctcgaccg cccgggtcagt gaggaaagtgg ggttctgtaa gaagctcatg ccagaagaga 240  
ggctcgccgc ccatcagcta gttggcgagg taacggctca ccaaggcaat gacgggttagc 300  
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gca 363

<210> 34  
<211> 363  
<212> DNA  
<213> Bordetella strain SHA-110

<400> 34  
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gagtaactca cttccgggtg ggggataact gtcggaaagg gtggctata ccccatatgc 180  
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gca 363

<210> 35  
<211> 343  
<212> DNA  
<213> Bordetella strain B1-10

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cccgcagaagcg cgggacaaca gaccgaaagg tttgctaata ccgcattgagc tcctgctggc 180  
tagagtggca agagggaaagg ccgaaaggcg ctggggagg ggccctgcgtc ccatcagcta 240  
gttggcgggg taacagccca ccaaggcgat gacgggtagg ggacctgaga gggtgacccc 300  
ccacaatgaa actgaaacac ggtccatacata cctacgggtg gca 343

<210> 36  
<211> 342  
<212> DNA  
<213> Bordetella strain B1-12

<400> 36  
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ccgaagagcg ggataacaga ccgaaaggac tgctaatacc gcatgagctc tcggcagtt 180  
gagggggccgaa gaggaaaggc ccgaaaggcgctttggggagg gcctgcgtcc catcagctag 240  
ttggcgaggt aagagctcac caaggcgatg acgggttaggg gacctgagag ggtgacccc 300  
cacaatggaa ctgaaacac gttccatacatac ctaacgggtgg 342

<210> 37  
<211> 342  
<212> DNA  
<213> Bordetella strain B6-52

<400> 37  
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gcccatttgt gggggataac gcggcgaaag tcgcgctaatt accgcatacg ccctgagggg 180  
gaaagcgggg gattttcgg aacctcgcccaattggagcg gccgatgtca gattagctag 240  
tttgttagggtaaaggcctac caaggcgacg atctgttagcg ggtctgagag gatgatccgc 300  
cacactggaa ctgagacacg gcccgactc ctacgggagg 342

<210> 38  
<211> 342  
<212> DNA  
<213> Bordetella strain B6-60

<400> 38  
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gcccatttgt gggggataac gcggcgaaag tcgcgctaatt accgcatacg ccctgagggg 180  
gaaagcgggg gattttcgg aacctcgcccaattggagcg gccgatgtca gattagctag 240  
tttgttagggtaaaggcctac caaggcgacg atctgttagcg ggtctgagag gatgatccgc 300  
cacactggaa ctgagacacg gcccgactc ctacgggagg 342

<210> 39  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer TPU1

<400> 39  
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<210> 40  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer RTU8

<400> 40

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<223> Primer Myk0109-T7	
<400> 41	
gtaatacgcac tcactatagg gacgggtgag taacacgt	38
<210> 42	
<211> 40	
<212> DNA	
<213> Artificial Sequence	
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<223> Primer R259-SP6	
<400> 42	
atttaggtga cactatagaa tttcacgaac aacgcgacaa	40
<210> 43	
<211> 418	
<212> DNA	
<213> Artificial Sequence	
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<223> IGF2/H19 Amplicon	
<400> 43	
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gtccccattcg cggccacttt cctgtctgaa gaccgcattg tgccgggctg tgcttacggc 360	
tcgcgggcgc actctactga caagcggtgg gcggcctcac agactctccc aggccccgc 418	
<210> 44	
<211> 269	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> K-Ras Amplicon	
<400> 44	
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aaaatgtgac tatattagaa catgtcacac ataaggtaa tacactatca aatactccac 180	
cagtacctt taatacaaaac tcacctttat atgaaaaatt atttcaaaat accttacaaa 240	
attcaatcat gaaaattcca gttgactgc 269	
<210> 45	
<211> 428	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Amplicon 1	

<221> misc\_feature  
 <222> 123  
 <223> n = T or C  
  
 <400> 45  
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 canagggctc ttgaaaaacag gccagctgcc cagggcattt ggggactgaa tgtccacctt 180  
 attctcccag gggcttgac attggaaacc atttttgtga gtgggttat gattatactc 240  
 acgaggaatg gccttctac aaagcaaggc ccacagacta ccccactcaa gaacagcagg 300  
 tatgtgggc agaggctggg gagcaggacc catcctgtga ggaaggaggg agtgggagtc 360  
 tgaaggaat ggccggaaag gatgttacctt gggaaatact ccacagtctc cccaattcc 420  
 gactcttg 428  
  
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 <211> 429  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2  
  
 <220>  
 <221> misc\_feature  
 <222> 174, 179  
 <223> n = T or G  
  
 <220>  
 <221> misc\_feature  
 <222> 317  
 <223> n = C or T  
  
 <400> 46  
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 gttctccctc tggtgcctt cctaaaaaat gagctgaaga tgacagtatt ttctttaca 240  
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 gcgttgcaga ggccccanggt ctccctgggtc ccggccaccc gtcacatttc cacattgct 360  
 gactgtgctc cctgcactcc actcaaggta agagttcaaa tagtcttgaa gggaaatcag 420  
 cttcaggat 429  
  
 <210> 47  
 <211> 465  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 3  
  
 <220>  
 <221> misc\_feature  
 <222> 285, 286  
 <223> n = G or A  
  
 <400> 47  
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 tgaatttaag taagaaaatgtt gaaattatca actaatgtgc tattaaaaat attatttta 120  
 gtaagaggca tccttaggat tacagaatgtt ctacattcta cagaaatgtc ttccctctcaa 180  
 gtcttcagag agcaaaggc acagctaccc aaagtgtttc cacttcaagc acagattgt 240  
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 tcgtgagtgg ttctgaaatgtt ataaataacta aaagtgcagca aaagaattat tgaagttata 360  
 attcctaata aaaagccatgtt gttataaaat attaagttt tttgaaaaaa atcttaaaac 420  
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<210> 48
<211> 426
<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon 4

<220>
<221> misc_feature
<222> 131
<223> n = A or G

<400> 48
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ctcatttaaa nccaattaa tattctgagt gagactaatc actcatttgc ctacgacctt 180
tttagaaaaagt tttttgttg aaatactgta cgtacgctta atctaaattt gcattgacta 240
tgttttagtg tatttataaa tggtaactc agtttctgaa attaaacttc ttatttgcaa 300
tttcttagtg ctggcagaca ctggctttt atttttagga taagaaaaca ggcatattct 360
tttgtgtcca ttatctagag cccatacttg ggcagcattt gaaatttcac cttAACCCCA 420
gacagg                                         426

<210> 49
<211> 533
<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon 5

<220>
<221> misc_feature
<222> 47, 50, 51, 52
<223> n = A or G

<220>
<221> misc_feature
<222> 111, 135, 185, 359
<223> n = T or C

<220>
<221> misc_feature
<222> 198
<223> n = T or G

<220>
<221> misc_feature
<222> 253
<223> n = C or A

<400> 49
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attingagac ttgcgtggca gtttgcgtt ggaatcacct ggtgcctccc tttacgtccca 180
cccanccctgt gcccaganc ccttcgcaag caccatatgc ttttagatcc tcgagcagcc 240
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tggcccaggg tcccacagcc agcaagtgg agctgcactg cccaaaggcagg tccttttagnc 360
agctctctgt tttcccccggcccccctcagc ccccccaggca gctctaaggg ctcagctgct 420
gcaggattcc ttagagaagc tgaagggtt gggcctcag ctcctggccg gggcaagtct 480
ggccaaggcag catggcagcg atgaagtcca catgatcgaa ggggtggatgc tta      533

<210> 50
<211> 422
<212> DNA

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&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Amplicon 6

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 131

&lt;223&gt; n = C or G

&lt;400&gt; 50

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caaggcttga ctgaaggacc tcatccagag tcactatcg agctcgctcc agcaactctcc 60
ttcatggagc cccagggtca gcagtggaga gggtcagagc accccccacaa ccccccacagc 120
gagatgacct nggctcgct tgcctctgcc accagagctg tgactgtggg caagatattt 180
tacagcagga ccagttctt gtccgaaggc aggctatta acaggaccta actcaggata 240
cttgtgtgga taaaatcatg tgtgaagagc ttttagggcc ttgcttctca aagagggggcc 300
ccaggccatc agcacacacgt gagtgtgcag ggggaagctc tcagccccac cccagccctc 360
tttacaagac ccccgcggtgg cacctgtggc gtggcacctg tgtgcactcg tttttcaaa 420
gc                                              422

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&lt;210&gt; 51

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Amplicon 7

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 228, 230, 235, 236, 240, 243, 245

&lt;223&gt; n = A or T

&lt;400&gt; 51

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atccctctgt ctctccacca ggaactagaa ttttgttat cactgcgtt atttttttct 60
tttagttac cacatgtta ttttatctata agtaatataa cgatctgtt tgcttctcta 120
tattgtgcca tatgtcgtt ttagcaactt gcttttagct gacggttctgt tttcaagatt 180
catccatgtt gctgcataaa cctaacattc acttactgtt gctggtnan aacannccan 240
cangngagca cagacatttgg ggttgtttcc aagacatgtt tcaatggcaa aaattaagat 300
gtctgacaaa accaagagtt ggagaggatg tggatggctt ggaattttat ctgctcctt 360
acacccactc tggaaaaact gtacaaacaa ttctgcaagg atttttccag a      411

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&lt;210&gt; 52

&lt;211&gt; 445

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Amplicon 8

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 84

&lt;223&gt; n = C or G

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 265, 269

&lt;223&gt; n = T or C

&lt;400&gt; 52

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gactggcagc ctagacagaa ggantgctat ttgtcttttc tggctgacag ctgagcagga 120
ccagcgctgg ctgcaaccaa ggagcatgtc ttgcattgtc atacttctgc ttccaaacag 180
ccctcttttg tttgtgtgtt gaagttccca taccgtctgc catctcagca ttcctctgg 240

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ctgaacctcc ttcacagttt gtacnctang ttaaattagc tgttcaattc ctccaggaga 300  
 aaggactgtg gctattagtt cttagaagcc ccaaagagcc cagtatggc ctaggcttg 360  
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 ttaggagct tgaaacccag cagac 445

<210> 53  
 <211> 425  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 9

<220>  
 <221> misc\_feature  
 <222> 136  
 <223> n = A or C

<220>  
 <221> misc\_feature  
 <222> 385  
 <223> n = G or A

<400> 53  
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 tatagacaag gtggggggag cttctttag gcccccttgg gctctgacat ttcatgaacc 180  
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 ctcaagtgcag agggctgagt gggctcttgt tcagacgggt ggtcaggag agatgggtc 360  
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 gccct 425

<210> 54  
 <211> 424  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 10

<220>  
 <221> misc\_feature  
 <222> 76  
 <223> n = C or G

<400> 54  
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 atatttctga caacctgtaa ctctggcag gcccactgca gctgacccca gctactgcag 360  
 aaaatgaagg ccagacaaaag gagagggcca cactgctccc aagtggtgg agtgttggc 420  
 caat 424

<210> 55  
 <211> 393  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 2.1

<220>

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<221> misc_feature
<222> 157
<223> n = T or A

<400> 55
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ggccctacc cactgattga ttggacctgt gcctcncca ggtgtatggtc aagtggactt 180
tgaggagtt gtgacccttc tgggacccaa acttccacc tcaggatcc cagagaagt 240
ccatggcacc gactttgata ctgtcttctg gaaggtatcc cctggctagt tgggacccag 300
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agggggatg accacctcag gttgtgtcc act 393

<210> 56
<211> 499
<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon 2.2

<220>
<221> misc_feature
<222> 103
<223> n = T or G

<400> 56
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cagatcccaa tcctctggtg gttcatggtg ttgtcaatga cangtctctc ctgtcaccc 120
cagtatgaaa atgaggagac ttacagggtg cgaacattcc agataggtac aggggagaaa 180
ctggtaagg ccctggttcc agccttctg ggtagaacca tctcctctta tgccacctgt 240
ttgggccccct cctgggactt tattcaccgtg ccagacttca tggaggaact gttaccagg 300
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atgtcaccga agccctctga gcctgtttgc tccttgtaa agcagtgaga tgaacctcat 420
agggttctta tgggaactaa atggcctaag gcatggcaag caggtcccaa gtgcctggct 480
ctgtgaaaag gctgctgag 499

<210> 57
<211> 399
<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon 2.3

<220>
<221> misc_feature
<222> 31
<223> n = C or G

<400> 57
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gggttgcgt gtttcttct tggacagcag ggtggagtgg gcatccctcc gggatccac 180
tttgtgaaca aagaggggc ggaaccagct gccttcattt tccttgaat agaaaactgca 240
ggacagagga gttgggggg acgcgcggag gttgggggag ccccagcaat tccatccact 300
tgatgtcct gctcccttag accagtgacc cacattctg ggaacagggc cacggagtcc 360
tgtggcagct ccagactgtg aaatgttatt ggagccagc 399

<210> 58
<211> 365
<212> DNA
<213> Artificial Sequence

<220>

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<223> Amplicon 2.4

<220>  
 <221> misc\_feature  
 <222> 211  
 <223> n = T or C

<400> 58  
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 ggttagccac ctgagaatcg ccacaggtgc actgttgggg gtgagaggta taggtcagtg 180  
 agctgtgtgg acccccagca gatgacctcc ncaaggttg ctaagtggtg gggacggggg 240  
 aggccgggttg gcctgggtcc ctgttagcagc aagactccct gagttccctc tgccttggtg 300  
 gaagaccatg ctggggaggg gatgacccta gacacaagtc taggagacct ggatttgagc 360  
 tccag 365

<210> 59  
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 <212> DNA  
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<220>  
 <223> Amplicon 2.5

<220>  
 <221> misc\_feature  
 <222> 77  
 <223> n = A or G

<400> 59  
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 tgccgtctgg tctcggact cttggagct gatcactctc ttgctccctg cctaggcccc 180  
 tctccagaag gcccgtatgcc cctgggtggg ggcgaggacg aggtatcaga ggaggcagta 240  
 gagcttcctg aggccctcggc ccccaaggcc gctctggagc ccaaggagtc caggagcccg 300  
 cagcaggtgg gaccacatg gaggcctgca gaacctgagc tgtgaactgg caaccctggc 360  
 tctggggccg agtcacccctg cacaaggagg 390

<210> 60  
 <211> 396  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 2.6

<220>  
 <221> misc\_feature  
 <222> 131  
 <223> n = A or G

<220>  
 <221> misc\_feature  
 <222> 239  
 <223> n = G or C

<220>  
 <221> misc\_feature  
 <222> 254  
 <223> n = C or A

<220>  
 <221> misc\_feature  
 <222> 283  
 <223> n = A or C

<400> 60  
 cccatgacac tggcttacct tgcgtcaggc agatggcagc cacacagtgt ccaccggatg 60  
 gttgattttgc aagcagagtt agcttgtcac ctgcctccct ttcccgggac aacagaagct 120  
 gacctctttgc ntctcttcgc cagatgtga gtctccgggg ctctatgggt ttctgaatgt 180  
 catcgccac tcagccactg gatttaagca gagttcaagt aagtactgggt ttggggagnaa 240  
 gggttgcagc ggcngagcca gggctccac ccaggaagga ctnatcgccg agggtgtggg 300  
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 tttgtgtggc ttgtatgcctt ctgggtgtgg aatttg 396

<210> 61  
 <211> 368  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 2.7

<220>  
 <221> misc\_feature  
 <222> 100  
 <223> n = A or G

<400> 61  
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 agtggttctg aaatgataaa tactaaaagt cagaaaaaga attattgaag ttataattcc 180  
 taataaaaag ccatggtttat aaaatattta agtttttga aaaaaatctt aaaaccacca 240  
 ttgcattgt ttttatacta ctcaaggctt tccagagctc cccaactccc ctcaattgtt 300  
 aatctttaac aagtccgtgcc atctattcag aaatgattat tcttcctatt ttgagttggg 360  
 aaacccac 368

<210> 62  
 <211> 451  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 2.8

<220>  
 <221> misc\_feature  
 <222> 228  
 <223> n = A or G

<220>  
 <221> misc\_feature  
 <222> 341  
 <223> n = G or T

<400> 62  
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 caccctgcctt cagaccacg ccctgtgccc ccagccgccc caccacccac agaccccaga 180  
 gggaggacgt caggcgtcca ggctggccacc tttagctgg gcaggccncc gggatggca 240  
 tctgcataatgg caactgcacc cttggagcgc accaggcagt ccccaaaatt aatcacctcc 300  
 acctgcccgc aaggcttcaa ggtctgtgag gggaaagcaa nggtccagag tgagggtgca 360  
 gaccacaccc cagccctcag caagccccgg gggcccccaca cggtcacatc ccaagccagc 420  
 caccacacac tgccttcctc tgcaagtac c 451

<210> 63  
 <211> 790  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Amplicon 2.9

<220>  
 <221> misc\_feature  
 <222> 300  
 <223> n = C or G

<220>  
 <221> misc\_feature  
 <222> 696, 741  
 <223> n = C or T

<220>  
 <221> misc\_feature  
 <222> 771  
 <223> n = A or T

<400> 63  
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 accagatctg gtctgcgtgt atcagctgtt tggttgggc tctggaaagct aaaaaacgtc 180  
 tggaaagcac tgggtcacg gtcgcctggc tagtcggcc gcctcaacc tttaggcgtgg 240  
 atcgtacact cggcccccaa gttgcccggcc ccatccccag ccatcacttc ccggagcttn 300  
 agttcttcct tcagaaatac gaaacaacgt gtcttgatg tcagacctca caccctctgc 360  
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 gcagccactg gcttaaggtc accaagaaaag agcggagggg cggggctgcg gccaggctcc 480  
 ggacttccatg cgggttccgg gttcccgccc tgggtctccc aaaaccccgag agcccccttc 540  
 caccgcactt atcctaccga agcgttcaga cctgcccggc ttctgactc gaatccggta 600  
 acctgataag tccgaagcgt tccagtggagg gcggggcctc acgaaggcaa cccttcgcgc 660  
 aacctatcaag aatccccctc agcaacgtt tgcccnngccc atatgggtcc ggcctcccaag 720  
 cctccctaag ccctttccca ntgggtctccc gcctcgctg ctagcgaggc nggcattggc 780  
 agaacggact 790

<210> 64  
 <211> 496  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 2.10

<220>  
 <221> misc\_feature  
 <222> 378  
 <223> n = T or G

<400> 64  
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 tcagccccca ccccgccccca attttacaga agaaaaacac aaggctcagg aagtcaagg 180  
 ccacccaagg aaggtcttac ggctcaggaa ggagcccagg tccaggtcctt gggacctggg 240  
 tggtgggggc gtgcagagcc tgagctggg cccactgtc aggttcaagg gggcccggc 300  
 tgcagcacca ctgcggccagg ctgaccgtac tggggccccc gctaaccttgcctt 360  
 ctcttacctt cccagggnaa tgatgcggaa gagcctaagg gggtcaccag cgaaggtagt 420  
 agtccccggcc cctgcggcccttcccttccc cccagggttc tggcctcagg gcctaccctc 480  
 accctctccc 496

<210> 65  
 <211> 395  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Amplicon 2.11

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<220>
<221> misc_feature
<222> 137
<223> n = A or G

<400> 65
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tcaaagcccc tgggagaata aggtggacat tcagtcccca aatgccctgg gcagctggcc 120
tggggcaag agccctntgg gaacagatct atgggaagcc atctttccag cctcacctat 180
agttataact gctgtactcg aagtccacca gcatgaggct gtcagcattt tctggctctg 240
agagcagcaa gatgtccct gggggaatgg ggtgagggtc tgctcactcc agagccctct 300
ggctttcca tcttgggtta ggagactcg atgccttctc ctaccttcctt ggtatgtcatt 360
gtggcagaag acgactggcg atggggtaga ctcta 395

<210> 66
<211> 353
<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon 2.12

<220>
<221> misc_feature
<222> 249
<223> n = A or G

<400> 66
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tgccccacat acctgctgtt cttgagtggg gtagtctgtg ggccttgctt tgttagaaagg 120
ccattcctcg ttagtataat cataaaaccca ctcacaaaaaa tggttcccaa tgtcaaagcc 180
cctgggagaaa taaggtggac attcagtccc caaatgcctt gggcagctgg cctgtttca 240
agagccctntt gggAACAGAT CTTGGGAAG CCATCTTCC AGCCTCACCT ATAGTTATAA 300
ctgctgtact cgaagtccac cagcatgagg ctgtcagcat tttctggctc tga 353

<210> 67
<211> 598
<212> DNA
<213> Artificial Sequence

<220>
<223> Amplicon 2.13

<220>
<221> misc_feature
<222> 80, 206, 295, 373, 400, 479
<223> n = A or G

<220>
<221> misc_feature
<222> 315, 317, 318
<223> n = A or T

<400> 67
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caatcagact caagcctggn tgcaaatccc ggctctacca ctgcttcct gtctgatctg 120
aacgagttac ctaacctctc cgagcttatac tacaaaagct gaatgatcct tcctctatag 180
agctatttgcg agaataagga gatggnggg ggtcacacca tccccaaattt accaagggat 240
cttccctctga cagagactga gcaagatcca gctggctga gctgtgtgga ttcncctcc 300
agctgtgcac ctattnnnta accagacacg tcctccagcc cccaaagat at acccaggaat 360
tcgaaaggtt aantgaaagt cacaacttcc cagcagctcn caatcaagca cagcaaacac 420
gtgtgtccccc agcaccttcc gcagttccagc cccacccctcc ttgctgtgc gtttagagna 480
gcagectgag accagacctc caggtcttcc tcatccaacc cacctggctg gcatcctcgg 540
gtttgggggt ctgtatagt cttcaggaag aaagacctgc cactgacata ctgtggga 598

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<210> 68  
 <211> 382  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2.14  
  
 <220>  
 <221> misc\_feature  
 <222> 48  
 <223> n = T or C  
  
 <220>  
 <221> misc\_feature  
 <222> 154  
 <223> n = A or G  
  
 <400> 68  
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 tggaggttac ctgggcaatt cagccacacg cacnaatctc ttccaggctt catcgctagt 180  
 cagcaggatt ttcagatgca ctgggctaac tttcttctgg aagtattcaa tgacttcttc 240  
 agtgaagcgt ttctttcta gttggaaaca aaaaggataa gattggaaaga aagtttgcta 300  
 ccacataaaat ggcattgagt ataaggttgt tcgggtttaa tcctcctgaa ccagctgtca 360  
 catggggat ttttcatggaa gg 382  
  
 <210> 69  
 <211> 398  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2.15  
  
 <220>  
 <221> misc\_feature  
 <222> 205  
 <223> n = C or G  
  
 <220>  
 <221> misc\_feature  
 <222> 277  
 <223> n = T or A  
  
 <220>  
 <221> misc\_feature  
 <222> 304  
 <223> n = T or C  
  
 <400> 69  
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 gcccggggaaa agagtcgacc ccatgctctg ccggcccccgc accccacccca tcgggaatcc 120  
 ccaccgtctt tcccaatcac cttcttcttc tcaaggcctc ccatcgtctcc acgttgagga 180  
 gccgactagg gccgcgcgta caggnagctc cacttcctcc cgcacgtgcc ctgccaaggaa 240  
 ccccgaggac cctccccacc ccacgctgtc tgtttngcgg ggctgcccaa tgagatgcct 300  
 gtanaagtcc agggaaagat ggggattttcc tcctcaagat ttaaaactat agtctgaaaa 360  
 aaatcaactga gaacacttcc tccagatctt tcccgctc 398  
  
 <210> 70  
 <211> 398  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>

&lt;223&gt; Amplicon 2.16

<220>  
<221> misc\_feature  
<222> 117  
<223> n = C or G

<400> 70  
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cctggctaat gccaccctct cttccggctg ccttcagga agaccatgct caatgacctc 180  
ctgcgggtcg atgtgaaaga ctgctcctgg tgcaggtggg tggcccgctg ctccaggggcc 240  
ctgcctttcc tcctagaaca cagtggcaca gtgctgggtc ccagttgcta gcagagtctc 300  
tctcatcatg ggaagctaga aagaagcttc caggaggaga taaccacggc ctcagggatg 360  
ccacatccag agccgcccctg tcaggctgag gagatcaa 398

<210> 71  
<211> 380  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Amplicon 2.17

<220>  
<221> misc\_feature  
<222> 37  
<223> n = A or C

<220>  
<221> misc\_feature  
<222> 329  
<223> n = C or T

<220>  
<221> misc\_feature  
<222> 350  
<223> n = A or G

<400> 71  
tgaatcctca tctgggaaag tttcaagaat aaaagcngtc ccatctcagc agtctcgagt 60  
gtggtaaaat gtgagcgggc cctgtgaggc cggggctgag ctgtcctctc cccctgcagg 120  
tggcccagag tggcgagatc ccccccattt gctgcaactt ccccggtggct gtgtgccggg 180  
acaagatgtt tgtattctct gggcaaagcg gagccaaaat aaccaacaac ctcttccagt 240  
ttgaattcaa ggacaagacg tgagtactct ggccagtggg gtggagggag gacggtcagt 300  
tccctcgaat cttctgaat atgaagaang cctcttgcac ctggtgccn tggttaaccat 360  
ccttgtgagc tctgcaaaca 380

<210> 72  
<211> 698  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Amplicon 2.18

<220>  
<221> misc\_feature  
<222> 653  
<223> n = C or T

<400> 72  
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ctcacagctt tgaggccaa gagtcccatc taaggtgtca gcaaggcag tgccctcaga 180

gcctcgagggg	tgggtccttc	ctgccccttc	caatttctgg	tggtgcccaag	agttcccttga	240
agtcccttgg	ctcgacgctg	tatcactctg	ccttgggtt	tacctgccgc	cttcccttcgg	300
catctgtgtc	ttcacacacggc	cctcttgtaa	ggacaccagt	cattgcgtta	ggggcccaccc	360
taatcccgta	tgacaccttc	aaaacttatt	acctctgcaa	agaccctatt	tccaaaaaaag	420
gtcacatcc	cagtgtgtgc	agtttaggacc	tcaagtgtatc	tttgcggggg	cacagtccaa	480
cctgtctaccc	atccatcatt	ttgtattctg	agatcttttt	ttctgttttt	agctatgtga	540
aaggcatcta	ctcttttggc	ttgatggaaa	ccaaacttcta	cgaccaggca	aaaaaactcg	600
ccaaagaggt	aagtgggtcc	ttcctaaggt	gcctgacccc	tcagggagta	gcngttggct	660
ggaccagggc	atatgaggggg	caccattcg	gtgtgaccc			698

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<210> 73
<211> 698
<212> DNA
<213> Artificial Sequence
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<220>

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<220>
<221> misc_feature
<222> 257
<223> n = A or G
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<400> 73
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aaatgaaatg cagtgattaa aggacacaag gcctcagtgt gcatcattct cattgtggct 180
ttcaggcgcc tgggaagac agggtgggga tggtggcttc gggaggtgag gtgctctggg 240
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agaaatgaaa atgctttgtg gactgtgag gacgggtgc aa ggtgaggtt tcccagctca 360
ccggatcatg gccagcaccc agggcatcag ctctgcctt atgggggtt ctgcagggtgg 420
gaagtcttg gccttcagaa tgacccatg ggcctctgg aagggtctt ccccccactgc 480
tgcctccacg cgctgccgc atgtggccag cttgggtcgg cttcgtcaga a cttggcagcc 540
agcaccacag ggctgtgggg aaaagggtac agactgggaa tggatggtt tgagggcagg 600
gatgggcagc atctgattt gggaccacag atctccagga ggtgtttgca cacacactta 660
agcacagtgc catagccccgg tggcagca taaggcagg 698

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<210> 74
<211> 395
<212> DNA
<213> Artificial Sequence
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<220>  
<223> Amplicon 2.20

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<220>
<221> misc_feature
<222> 98
<223> n = C or G
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<220>
<221> misc_feature
<222> 114
<223> n = G or A
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<400> 74
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ctcacccgat gcatagtcttc atacttgaga aaaagcacgt tcgagttccat gcggtgtctcc 180
cagaactctt gcacgtgtcc aaaccaggag ccgttagccca ctggggagac agggggacagg 240
gtgagccaca cggctgggca ggagaagcgc acacatgggg ccatccccac cccacaggc 300
tgccctctgtt ccacccagca gccgtatgg agacatctgt atccctgcgg acaagtctgg 360
caaaqqcccc cqaaqqactt acqtcttqaq ccatc 395

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<210> 75

<211> 383  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2.21  
  
 <220>  
 <221> misc\_feature  
 <222> 21  
 <223> n = C or T  
  
 <220>  
 <221> misc\_feature  
 <222> 61  
 <223> n = A or G  
  
 <220>  
 <221> misc\_feature  
 <222> 83, 84, 85, 86  
 <223> n = C or deletion  
  
 <400> 75  
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 ngagactaac aagaacccct ggnnnnagag ggcaggaaca ggtggacgaa caaccagatg 120  
 agagaacgta ccaggcatgc aagctagacc cagaatcaa cgggctgagg cttagcgtcc 180  
 cctacggcgt ccaccaggct gaccgcggc ctgctggcc cggggggagg ggccttcctg 240  
 ctgggtcga gctgcagcgc acgggtggc attagaggca caatagagca gtttagttag 300  
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 caggacagca cagtagcac caa 383  
  
 <210> 76  
 <211> 385  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2.22  
  
 <400> 76  
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 ccctgggtgt ccatggccct tgcagatact tgctggcag gaatgagcct tctgaggcaa 120  
 gactgctgga ttgtccaggc agggctattg atgccagccc cttaacttaa ttctgcccag 180  
 acaagaagat gtttgagggt aagcggcggg agcagctgtt ggcactgaag aacctggcac 240  
 agctgaacga catccaccag cagttacaaga tccttgatgt catgctcaag gggctcttta 300  
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 <210> 77  
 <211> 357  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2.23  
  
 <400> 77  
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 gaagtgggt taaaataaat gggatggga gcagtctgtg atgggcactg cgaagccact 120  
 cagccctggc gggatccct caggtgctgg aggactccccg gacagtgttc accgctgctg 180  
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 ctgccccggcc ctgtcctccg caccaccgaa tcttctctag ctgctccttc tctcctgttc 300  
 ttgtcactct tttttctcc ccgaaatgc cctcttgtgg caccttctaa gtgggtcc 357  
  
 <210> 78

<211> 355  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2.24  
  
 <220>  
 <221> misc\_feature  
 <222> 183, 256, 284, 327  
 <223> n = C or T  
  
 <400> 78  
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 tccagatgaa atgtgttcat accgttagaca tgacagagac cagctcttgt tcagtgc(ccc 120  
 ctacacctgtg gctgcttcct cggctcctcg aacagatcg ccgagcttat ggaggaactt 180  
 gcnacagcc tctctaggcg ggcccggc tcatactaga gaagacaagg aaaaggaaat 240  
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 <210> 79  
 <211> 399  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Amplicon 2.25  
  
 <220>  
 <221> misc\_feature  
 <222> 279  
 <223> n = A or G  
  
 <400> 79  
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 agaggagagg cttaatccct tttgttttg aacttagatc aaattactca taaaacaaga 180  
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